

CLAIMS

We claim:

1 1. A method of forming a security enclosure, comprising:
2 providing an electronic assembly;
3 enclosing the assembly in a tamper respondent wrap,
4 such that the wrap forms fold lines at a first and second
5 end of the assembly;
6 placing the enclosed assembly in a fixture, wherein the
7 fixture comprises a base upon which the assembly rests, a
8 first stationary arm mounted on the base holding the fold
9 lines at the first end of the assembly, a second arm
10 slidably mounted on the base, and a traversing mechanism to
11 bias the second arm toward the fold lines at the second end
12 of the assembly; and
13 heating the enclosed assembly.

1 2. The method of claim 1, further comprising heating the
2 enclosed assembly at a temperature of approximately 60 °C.

1 3. The method of claim 1, further comprising heating the
2 enclosed assembly at a temperature of approximately 40-90
3 °C.

1 4. The method of claim 1, further comprising heating the
2 enclosed assembly for approximately 1 hour.

1 5. The method of claim 1, wherein the fixture comprises a
2 clamping device.

1 6. The method of claim 1, wherein the tamper respondent wrap
2 comprises a flexible material having tamper respondent
3 detection devices.

1 7. The method of claim 1, wherein the tamper respondent wrap
2 comprises:

3 at least one pierce and laser respondent layer;
4 a delamination respondent layer; and
5 an adhesive between the pierce and laser respondent
6 layer and the delamination respondent layer.

1 8. The method of claim 7, wherein the pierce and laser
2 respondent layer and the delamination respondent layer
3 comprise a plurality of ink lines on at least one side of
4 the pierce and laser respondent layer and the delamination
5 respondent layer.

1 9. The method of claim 1, wherein the electronic assembly
2 comprises a cryptographic processor.

1 10. The method of claim 9, wherein the cryptographic
2 processor comprises a printed circuit board, having mounted
3 thereon:

4 an encryption module to carry secured sensitive
5 information;

6 a memory to store a key necessary to access the
7 information;

8 an erase circuit to erase the information in the
9 encryption module in the event the tamper respondent wrap is
10 breached; and

11 an enclosure monitor to activate the erase circuit in
12 the event a breach is detected.

1 11. A method of producing a tamper respondent enclosure,
2 comprising:

3 enclosing a cryptographic processor in a tamper
4 respondent sheet, wherein an adhesive material secures the
5 enclosure;

holding the enclosed cryptographic processor such that
the adhesive material remains intact; and

8 applying heat to the enclosed cryptographic processor
9 to strengthen the adhesive material.

12. The method of claim 11, further including holding the
1 enclosed cryptographic processor in a clamping device.
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13. The method of claim 11, further including applying heat
at a temperature of approximately 60 °C.

1 14. The method of claim 11, further including applying heat
2 at a temperature of approximately 50-70 °C.

1 15. A method of forming a security enclosure, comprising:
2 providing a circuit card;
3 enclosing the card in a tamper respondent cloth,
4 wherein an adhesive secures fold lines of the cloth;
5 holding the fold lines of the cloth to maintain
6 adhesive contact; and
7 heating the enclosed card.

1 16. The method of claim 15, further comprising holding the
2 cloth in a clamping device to maintain the adhesive contact.

1 17. The method of claim 16, wherein the clamping device
2 comprises:
3 a base upon which a security enclosure rests;
4 a first stationary arm mounted on the base, which holds
5 a first end of the security enclosure;
6 a second arm slidably mounted on the base; and
7 a traversing mechanism to bias the second arm toward a
8 second end of the security enclosure.

1 18. The method of claim 15, further comprising heating the
2 enclosed card at approximately 60 °C for approximately 1
3 hour.

1 19. The method of claim 15, further comprising curing the
2 adhesive..

1 20. The method of claim 15, wherein the circuit card
2 comprises a cryptographic processor.

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1 21. A method of assembling a security enclosure comprising:
2 providing a fixture;
3 providing an enclosure having a cloth member thereon;
4 placing the enclosure in the fixture;
5 heating the enclosure; and
6 removing the enclosure from the fixture.

1 22. The method of claim 21, wherein the fixture comprises a
2 clamping device.

1 23. The method of claim 22, wherein the clamping device
2 comprises:
3 a base upon which a security enclosure rests;
4 a first stationary arm mounted on the base, which holds
5 a first end of the security enclosure;
6 a second arm slidably mounted on the base; and
7 a traversing mechanism to bias the second arm toward a
8 second end of the security enclosure.

1 24. The method of claim 21, wherein the enclosure comprises
2 a circuit assembly having a tamper respondent cloth wrapped
3 therearound.

1 25. The method of claim 21, wherein heating comprises
2 exposing the enclosure to a temperature of approximately 50-
3 70 °C for about 1 hour.

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